REMARKS

In response to the Office Action dated July 15, 2004, Applicants respectfully request reconsideration based on the above claim amendment and the following remarks. Applicants respectfully submit that the claims as presented are in condition for allowance.

Claims 1-2 have been amended, and claims 3-13 have been canceled without prejudice. Support for the amendment can be found in the entire specification. No new matter has been added by the amendment.

Claim Priority

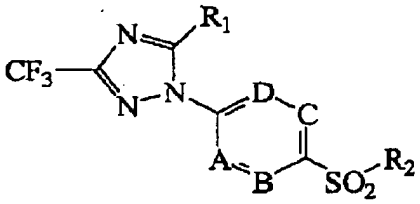
The Examiner states in the Office Action Summary that the priority documents had not been submitted to the patent office. Applicants submitted the priority documents on June 27, 2003. A copy of the documents that were submitted is attached hereto. In addition, Applicants submit herewith a copy of the stamped postcard that indicates that the patent office received the priority documents on June 27, 2003. Applicants request that the Examiner acknowledge that all of the certified copies of the priority documents have been received.

Claim Rejections Under 35 U.S.C. § 102

Claims 1-2 stand rejected under 35 U.S.C. § 102(a), (b) and/or (e) as being anticipated by Sakya et al., US2003/0125368 (hereinafter "Sakya") and Pascal el al., EP 1,099,695 (hereinafter "Pascal") for the reasons stated on page 3 of the Office Action. Applicants respectfully traverse the rejection.

Claim 1 is a 1,2,4-triazole derivative represented by formula 1:

Formula 1



wherein: R_1 is a C_3-C_6 cycloalkyl group; a C_3-C_6 cycloalkenyl group; a phenyl group; a phenyl group substituted with one or more selected from the group consisting of a C_1-C_6 alkyl group, a C_1-C_6 haloalkyl group, a C_1-C_6 alkoxy group, a C_1-C_6 haloalkoxy group, a halogen group, an amino group, a monoalkylamino group, a dialkylamino

group, a nitro group, and a cyano group; a styrenyl group; a C_1-C_6 alkoxy styrenyl group; or a pyridyl group; R_2 is a methyl group; and A, B, C, or D is independently carbon; or a non-toxic salt thereof.

The Examiner states that examples 1-4 and 6 of Sakya disclose the instant invention. The examples of Sakya, however, disclose sulfonyl aryl triazones containing phenylsulfonylamino substitution at 1st position of triazole, whereas the instant claims contain a methanesulfonylphenyl at 1st position, instead of methyl substitute. Therefore, the compound of Sakya has different structure from that of claimed invention. Thus, Sakya neither anticipates nor renders the compound as set forth in claims 1-2 obvious.

The Examiner also states that examples 17-27 of Pascal disclose the instant invention. In the examples 17-27 of Pascal, R_4SO_2 substitution is placed at 5th position of triazole and R_2 substitution is placed at 1st position of triazole, while R_2SO_2 substitution, in claim 1, is placed at 1st position of triazole and R_2 substitution is placed at 5th position of triazole. Therefore, the compound of Pascal is different from the claimed compound. Further, although one could argue that the compound of Pascal could be assumed as an isomer of the claimed compound, isomers are not necessarily suggestive of each other. Isomers having the same empirical formula but different structures are not necessarily considered equivalent by chemists skilled in the art and therefore are not necessarily suggestive of each other. *Ex parte Mowry*, 91 USPQ 219 (Bd. App. 1950). Therefore, the claimed compound is different from that of the compound of Pascal. Thus, Pascal neither anticipates nor renders the compound as set forth in claims 1-2 obvious.

Claim Rejections Under 35 U.S.C. § 103

Claims 1-2 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over the combined teaching of Sakya and Pascal for the reasons stated on pages 3-4 of the Office Action.

For an obviousness rejection to be proper, the Examiner must meet the burden of establishing that all elements of the invention are disclosed in the prior art; that the prior art relied upon, coupled with knowledge generally available in the art at the time of the invention, must contain some suggestion or incentive that would have motivated the skilled artisan to modify a reference or combined references; and that the proposed modification of the prior art must have had a reasonable expectation of success, determined from the vantage point of the skilled artisan at the time the invention was

made. *In re Fine*, 5 U.S.P.Q.2d 1596, 1598 (Fed. Cir. 1988); *In Re Wilson*, 165 U.S.P.Q. 494, 496 (C.C.P.A. 1970); *Amgen v. Chugai Pharmaceuticals Co.*, 927 U.S.P.Q.2d, 1016, 1023 (Fed. Cir. 1996). However, as stated above, neither Sakya nor Pascal teaches or suggests the feature "a 1,2,4-triazole derivative represented by formula 1, ..., R_2 is a methyl group; and A, B, C, or D is independently carbon; or a non-toxic salt thereof", as recited in claim 1.

Further, in addition to the structure difference, the claimed compound has different activities from that of Sakya. For example, the compound containing methanesulfonylphenyl substitution at 1st position of triazole has superior properties in selectivity for inhibiting COX-2 over COX-1, in comparison with the compound containing phenylsulfonylamino substitution at 1st position of triazole. Table 1, on pages 73-74 of the Application show that Example 27 (or 28), having the same structure to that of Example 44 (or 43) except the substitutions at 1st position of triazole, shows much higher selectivity for inhibiting COX-2 over COX-1. For example, Example 28 has 2.0 selectivity for inhibiting COX-2 over COX-1, while Example 43 has 0.93 selectivity for inhibiting COX-2 over COX-1. Thus, the compound containing methanesulfonylphenyl substitution at 1st position of triazole has also different activity from that of the compound containing phenylsulfonylamino substitution at 1st position of triazole. Accordingly, Sakya neither teaches nor suggests the claimed compound as set forth in claim 1.

The claimed compound is also different activities from that of the compound of Pascal. The claimed compound, for example, shows unexpectedly superior in inhibiting COX-1 and COX-2 and in selectivity for inhibiting COX-2 over COX-1, in comparison with the compound of Pascal. Examples 27 and 28 of the Application show 13.8 and 10.1 inhibition rates for COX-1 (1μM) and 16.04 and 28.62 inhibition rates for COX-2 (10nM), respectively. On the contrary, Examples 18 and 17 of Pascal, having different substitutions at 1st and 5th positions of triazole, show about 5 and 8 inhibition rates for COX-1 (1μM) and about 53 and 44 inhibition rates for COX-2 (1μM), respectively. Therefore, the claimed compound shows superior properties in inhibiting COX-1 and COX-2 as well as in selectivity for inhibiting COX-2 over COX-1 in comparison with the compound of Pascal. Thus, the claimed compound has different structure and activities from those of the compound of Pascal.

Accordingly, the combination of Sakya and Pascal does not render claim 1 obvious, since all of the elements of claim 1 are not taught or suggested by the cited references. Claim 2 is believed to be allowable due to its dependency on claim 1.

Conclusion

In view of the forgoing amendments and remarks, Applicants submit that this ap plication is in condition for allowance. Early notification to this effect is requested.

If there are any charges due in connection with this response, please charge them to Deposit Account 06-1130.

Respectfully submitted,

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Date: December 14, 2004

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This is to certify that the following application annexed hereto is a true copy from the records of the Korean Intellectual Property Office.

Application Number: Korean Patent 2002-0046551

Date of Application: 07 August 2002

Applicant(s): CJ Corp.

13 March 2003

COMMISSIONER

Print Date: 2003/03/14

[Bibliography]

[Document Name]	Change to informative data of applicant
[Receiver]	Commissioner
[Filing Date]	25 October 2002
[Applicant]	
[Name]	CJ Corporation
[Applicant code]	1-1998-003466-9
[Items to be changed]	
[Changed Item]	Korean Name
[Before change]	Cheil Jedang Corporation
[After change]	CJ Corporation
[Items to be changed]	
[Changed Item]	English Name
[Before change]	Cheil Jedang Corporation
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[Purpose]	We notice as above according to Art. 9 of the Patent Law, Art. 12 of the Utility Model Law, Art. 28 of the Design Law and Art. 23 of the Trademark Law.

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출 원 번 호 : 10-2002-0046551
Application Number

출 원 년 월 일 : 2002년 08월 07일
Date of Application AUG 07, 2002

출 원 인 : 씨제이 주식회사
Applicant(s) CJ Corp.

2003 년 03 월 13 일

특 허 청
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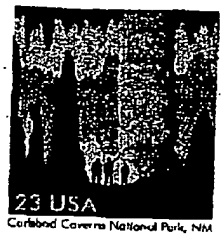

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THE STAMP OF THE PATENT OFFICE, PLACED HEREON, ACKNOWLEDGES RECEIPT OF:

Attorney Docket No.: YPL-0057
In Re: New U.S. Nonprovisional Patent Application:
Applicant: Il Hwan Cho, et al.
FOR: 1, 2, 4-TRIAZOLE DERIVATIVE, METHOD FOR PREPARING THE SAME, AND PHARMACEUTICAL COMPOSITION CONTAINING THE SAME

Utility Patent Application Transmittal (4 pages), Specification and Abstract (100 pages), Preliminary Amendment (30 pages), Executed Declaration and POA (12 pages) Recordation Form Cover Sheet (1 page), Assignment (4 pages), Claim for Priority (1 page), Korean Patent Application No. 2002-0046551 (138 pages), Limited Recognition Under 37 CFR Section 10.9 (b)(1 page), Certificate of Mailing by Express Mail (1 page), Filing Fee-Check-$1,086.00, Check-Recordation Fee-$40.00 and postcard receipt.

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